Contributions from the Division of Entomology, Department of Agriculture, Ottawa.

The Entomological Record for 1911.

BY

ARTHUR GIBSON,

Chief Assistant Entomologist.

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THE ENTOMOLOGICAL RECORD, 1911.

ARTHUR GIBSON, CHIEF ASSISTANT ENTOMOLOGIST, C. E. F., OTTAWA.

In *The Entomological Record*, which has been published every year since 1901, students of the several orders of insects have, in a readily accessible form, considerable information on the distribution, etc., of many species occurring in Canada. This information will be of special value now in view of the List of the Insects of Canada and Newfoundland which is being prepared by members of our Society. In the *Record* for this year I have endeavoured to include all references to new species described from Canada in 1911, in the literature to which I have had access.

The season of 1911 in Canada was a favourable one for the collection of insects. Although some collectors have reported the season to have been a poor one in their particular districts, on the whole, I judge that in most localities much material was present, and large collections were made by some students. During the night of June 28th, 470 moths were caught in a lantern trap at Trenton, Ont. This number represented many different species, and Mr. J. D. Evans informed me that he never had such success before. Large catches were made on many other nights.

We have again to gratefully acknowledge the invaluable help received from recognized authorities in the United States and elsewhere. Particular acknowledgment is due to Dr. L. O. Howard and his expert associates, Dr. Dyar, Dr. Banks, Messrs. Busck, Viereck, Rohwer, and Crawford; Dr. J. B. Smith, of New Brunswick, N. J.; Sir George Hampson, of the British Museum; Mr. W. D. Kearfott, of Montclair, N. J.; Prof. H. F. Wickham, of Iowa City, Iowa; Mr. E. P. Van Duzee, of Buffalo, N.Y.; Mr. W. Beutenmuller and Mr. J. A. Grossbeck, of New York, N.Y.; Dr. Henry Skinner, of Philadelphia, Pa., Dr. E. M. Walker, of Toronto, Ont.; Col. Thos. L. Casey, of Washington, D.C.; Mr. Chas. Liebeck, of Philadelphia, Pa.; Mr. J. D. Evans, of Trenton, Ont.; Mr. F. H. Wolley-Dod, of Millarville, Alta., and Prof. Cockerell, of Boulder, Col.

LITERATUR

Among the many valuable publications which have been received during the past year, and which are of interest to Canadian students, mention may be made of the following:—

BEUTENMULLER, WM. The North American species of Dryophanta and their Galls: American Museum of Natural History, New York, separates issued December 30, 1911. This paper is the tenth instalment of a series of articles on North American Cynipidæ and their galls. Six beautiful plates accompany the article, five of which are from the drawings of Mrs. Beutenmuller.

CASEY, THOS. L. Memoirs on the Coleoptera, II; New Era Printing Co., Lancaster, Pa.; issued Aug. 15, 1911. In 1910, we were glad to receive Memoir No. 1, and now Memoir No. 2 has recently appeared. This latter is a larger contribution than Memoir 1, being of 259 pages. It also is divided into 2 parts, viz.—I. New American Species of Aleocharinæ and Myllaeninæ; II. Notes on the Coccinellidæ with some General Remarks and Synonymy. Of the 397 species described as new, in part I., 50 are from Canada; 36 of these are from British Columbia, (mostly collected by Rev. J. H. Keen); 10 from Manitoba, (N. Criddle), and 4 from Ontario, 3 of which were collected at Ottawa, (W. H. Harrington).

GAHAN, A. B. Aphidiinæ of North America: Bulletin No. 152, Maryland Agricultural Experiment Station, College Park, Md., March 11, 1911, pp. 147-200. The study of parasitic insects is every year becoming more important and such results as are published in the above Bulletin are extremely useful. The author treats of 48 species of this subfamily of the Braconidæ. Five new species are described and in order to point out characters, correct errors in former descriptions, obviate the confusion in certain cases resulting from the numerous descriptions of the same species under different names, as well as to bring the descriptions all together in a convenient form for reference, a redescription is included of all the established species of which authentic specimens could be obtained. Eight species are stated to occur in Canada.

HAMPSON, SIR GEORGE F. (Bart.). Catalogue of the Lepidoptera Phalænæ in the British Museum, Vol. X, Noctuidæ, 1910, 829 pp., plates CXLVIII—CLXXIII; volume received 27th January, 1911, plates received 7th June, 1911. In this large volume 1,222 species belonging to 136 genera of the subfamily Erastrianæ, are classified. "The subfamily is homogeneous in appearance but is not very well defined structurally, being intermediate in characters between the Trifid and Quadrifid sections of the Noctuidæ, and having very close affinities on the one hand with the Acronyctinæ, and on the other hand with the Acontianæ, Noctuinæ, and Hypeninæ." The moths of the subfamily Erastrianæ are confined, to a large extent, to the tropical and warmer temperate regions. Records of only sixteen species which occur in Canada are given, but in the volume are several other species which are to be found within the Dominion. The beautiful plates which accompany this volume are of the usual high character.

HOPKINS, A. D. Contributions Toward a Monograph of the Bark-weevils of the genus Pissodes; U. S. Dept. Agric., Bureau of Entomology, Technical Series, No. 20, Part I; issued January 7, 1911. This further contribution to our knowledge of forest insects is very welcome. These bark-weevils are important enemies of pine, spruce, and fir trees, and such information as is given in this part is of much economic value. The results of the anatomical studies, as given in detail, are of much interest. Thirty species are recognized from North America; twenty-three of these are described as new, six of which are from Canada.

MOULTON, DUDLEY. Synopsis, Catalogue and Bibliography of North American Thysanoptera, with descriptions of new species; Technical Series No. 2[illegible] S. Dept. of Agriculture, Bureau of Entomology, pp. 56; issued June 13, 191[illegible] his synopsis and catalogue of the Thysanoptera will be found of much value to students of these insects; 118 species are listed, 10 of which are described as new. Six full page plates appear in the Bulletin.

SKINNER, HENRY. The Larger Boreal American Hesperidæ, including Eudamus, Erycides, Pyrrhopyge, and Megathymus. Reprint from Transactions of the American Entomological Society; Vol. XXXVII, No. 3, issued August 18, 1911; pp. 169-209, with one colour plate. This most useful paper will be much consulted by students of diurnal lepidoptera. The original description of each species is given, together with notes on distribution, etc., and where known, the food plants of the larvæ, descriptions of caterpillar and chrysalis, together with critical notes which will help the student to determine the species. Canadian records are included of three of the species. An interesting note at the end of the paper is that referring to *Eudamus electra* Lint., which was described from a specimen collected at Hamilton, Ont. It now seems as if this specimen of *electra* is the male of

Ephyriades zephodes, which has also been placed in the genus *Nisoniades*. The plate in colours accompanying the paper is an exceptionally good one. We hope to see many more such contributions from this well-known authority.

THEOBALD, F. V. A Monograph of the Culicidæ, or Mosquitoes, Vol. V; British Museum, 1910; received Feb. 24, 1911; pp. 646; plates I to VI. Since the previous volume was published, 392 species have been described, or old descriptions found. Of these the author is responsible for 106, 80 of which are described in this volume. Synoptic tables of the genera and the species in each genus in the Anophelinæ, Megarhininæ, Culicinæ, Heptaphlebomyinæ and Uranotaeninæ have been worked out. Numerous text figures occur throughout the volume.

WHEELER, W. M. A List of the Type Species of the Genera and Subgenera of Formicidæ: Annals of the New York Academy of Sciences, Vol. xxi. pp. 157-175; separates dated 17th October, 1911. This contribution from such a high authority will be most welcome to students of the Formicidæ. The list includes the genera and the subgenera, both living and fossil, up till June, 1911.

The following is a list of the names and addresses of collectors heard from during 1911:—

Anderson, E. M., Provincial Museum, Victoria, B.C.
Baird, Thomas, High River, Alta.
Baldwin, J. W., 74 Besserer Street, Ottawa.
Beaulieu, G., Experimental Farm, Ottawa.
Beaulne, J. I., Experimental Farm, Ottawa.
Bethune, Rev. Prof., O. A. C., Guelph.
Bolton, A. R. M., Quebec, Que.
Brittain, W., Seed Branch, Dept. of Agr., Ottawa.
Bush, A. H., 1105 Ninth Ave., Vancouver, B.C.
Carr, F. S., Edmonton, Alta.
Chagnon, Gus., Box 521, Montreal.
Chagnon, W., St. John's, Que.
Cockle, J. W., Kaslo, B.C.
Crew, R. J., 561 Carlaw Ave., Toronto.
Criddle, Norman, Treesbank, Man.
Dawson, Horace, Hymers, Ont.
Day, G. O., Duncans, B.C.
Dod, F. H. Wolley, Millarville, Alta.
Evans, J. D., Trenton, Ont.
Fyles, Rev. T. W., Hull, Que.
Gibson, Arthur, Experimental Farm, Ottawa.
Hahn, Paul, 433 Indian Road, Toronto.
Haight, D. H., Sudbury, Ont.
Hanham, A. W., Duncans, B.C.
Harris, J. F., Treesbank, Man.
Harrington, W. H., P.O. Department, Ottawa.
Heath, E. F., Cartwright, Man.
Hewitt, Dr. C. Gordon, Experimental Farm, Ottawa.
Hudson, A. F., Millarville, Alta.
Keen, Rev. J. H., Metlakatla, B.C.
Leavitt, A. G., St. John, N.B.

Lyman, H. H., 74 McTavish Street, Montreal.
McIntosh, W., St. John, N.B.
Metcalfe, W., 20 Lisgar St., Ottawa.
Moore, G. A., 850 St. Hubert St., Montreal.
Moore, W. H., Scotch Lake, N.B.
Metcalfe, W., 284 Lisgar St., Ottawa.
Nelles, Douglas H., Dept. Interior, Ottawa.
Nicholls, Arch., Sault Ste. Marie, Ont.
Perrin, Jos., McNab's Island, Halifax, N.S.
Rowland, Alton, Windsor Mills, Que.
Sanders, G. E., Experimental Farm, Ottawa
Sanson, N. B., Banff, Alta.
Simpson, W., Dominion Observatory, Ottawa.
Southee, G. R., Sherbrooke, Que.
Swaine, J. M., Experimental Farm, Ottawa.
Taylor, Rev. G. W., Departure Bay, B.C.
Tothill, J. D., Experimental Farm, Ottawa.
Treherne, R. C., Vancouver, B.C.
Walker, Dr. E. M., Biological Department, University of Toronto.
Wallis, J. B., Machray St., Winnipeg, Man.
Willing, Prof. T. N., Saskatoon, Sask.
Winn, A. F., 32 Springfield Ave., Westmount, Que.
Young, C. H., Geological Survey, Ottawa.

NOTES OF CAPTURES.

(Species described during 1911 are preceded by an asterisk.)

LEPIDOPTERA.

(Arranged according to Dyar's List of North American Lepidoptera, U.S. N.M. Bull. No. 52).

(Dyar's number).

65. *Eurymus eurytheme* Bdv. Mayo, Que., Aug. 26, (A. E. Richard).
92. *Euptoieta claudia* Cram. Toronto, Sept. 10, 1910, (P. Hahn). The third specimen taken at Toronto.
112. *Argynnis behrensii* Edw. Victoria, B.C., (Taylor).
113. *Argynnis halcyone* Edw. Peachland, B.C., July 18, 1907, (Wallis).
* *Argynnis sakuntala* Skinner. Ainsworth, B.C., Aug. 13, 1903, (Rev. G. H. Findlay); Kaslo, B.C., July 7, 1890, (Cockle); Laggan, Alta., (T. E. Bean); Entomological News, March, 1911, p. 108.
[illegible]. *Brenthis freija* Thunb. Mer Bleue near Ottawa, June 6, (Young). The first record for the Ottawa district.
207. *Polygonia satyrus* Edw. Hymers, Ont., May 9, (Dawson).
216. *Eugonia californica* Bdv. Saskatoon, Sask., Oct. 7. Only record I know of for the Province (Willing).
223. *Junonia coenia* Hbn. London, Ont., Sept. 24. (Morden); Sudbury, Ont., (Haight).

268. *Erebia discoidalis* Kirby. Roland, Man., June, 1909, (R[illegible]nt by Mr. Wallis).

270. *Erebia disa* Thunb. a. *mancinus* D. & H., Hymers, Ont., (Dawson).

345. *Thecla edwardsii* Saund. Treesbank, Man., July 18, 1910, (Wallis).

378. *Incisalia niphon* Hbn. Hymers, Ont., May 6, (Dawson).

419. *N[illegible]miades couperii* Grt. Hymers, Ont., May 9, (Dawson).

463. *Amblyscirtes samoset* Scudd. Stony Mountain, Man., June [illegible], 1910. (Wallis).

529a. *Euphyes vestris* Bdv., a. *metacomet* Harr. Husavick, Man., July 5, [illegible], (Wallis).

602. *Thorybes electra* Lint. In a letter dated July 27, 1911, Dr. Henry Skinner says: "I have discovered that *Eudamus electra* Lint., described many years ago, and taken at Hamilton, Ont., is an exotic species. It probably came to Canada as larva or pupa on fruit. See also Trans. Amer. Ent. Soc. Vol xxxvii., p. 208."

657. *Lepisesi[illegible] flavofasciata* Walk. Meach Lake, Que., May 27, flying in bright sunshine, (Young).

678. *Pholus pandorus* Hbn. Toronto, ([illegible] Island Breakwater), July 30, (P. Hahn).

699. *Phlegethontius convolvuli* L. a *cingulata* Fab. Hull, Que., fresh specimen, Sept. 1, (Fyles).

708. *Sphinx pinastri* L. A specimen taken at Waghorn, Alta., is in the collection of Dr. William Barnes. (Psyche xvii., 197, 1910).

817. *Clemensia albata* Pack. East Bolton, Que., on tree trunks in maple grove, July, (Winn).

943. *Androloma mac-cullochii* Kirby. St. Johns, Que., June 21, on lilac bloom, (W. Chagnon).

* *Demas electa* Sm. Winnipeg, Man., May 31, 1909, (Wallis); Jour. N.Y. Ent. Soc., Sept., 1911, p. 134.

981. *Apatela cretata* Sm. Winnipeg, Man., June 14, (Wallis).

* *Acronycta tristis* Sm. "Canada, viii.,5"; Ent. News, July, 1911, p. 316.

1047. *Aphareta pyralis* Sm. Banff, Alta., July 14, Aug. 28, 29, (Sanson); Cranbrook, B.C. Oct., 10, 1903, (C. G. Garrett). The latter is a new record for British Columbia. The date seems very late, if correct, (Dod).

1050. *Merolonche lugubris* Grt. Banff, Alta., June 12, 1910, (Sanson). New to Alberta. (Dod).

Bryophila avirida Sm. Humbolt, Sask., June 13, 1910, (E. Androchovitz).

Moma geminata Sm. Winnipeg, Man., June 10, 1910, (Wallis).

Hadeneta subjuncta Sm. Saskatoon, Sask., July 13, (Willing).

Hadena commoda Walk. (Hampson, vii., p. 199). Hymers, Ont., June 21-28, 1910 and 1911, (Dawson). The name should be used as prior to *alberta* Sm. *Satina* Streck. is probably the same species. I have three from Hymers, all of which are like specimens from Calgary; also one from Sudbury, Ont., (Dod).

Hadena bonilla Barnes. This was recorded last year from Metlakatla, B.C. The name is merely a manuscript one, chosen years ago but never published. I believe it to be the same as *multicolor* Dyar, described from Victoria, B.C., though specimens stand under both names in the Washington Museum. It is an ally of *vultuosa*, (Dod).

1151. *Hadena violacea* Grt. Banff, Alta, Sept. 20, 1909, (Sanson); new to Alberta (Dod).

1223. *Hadena morna* Streck. The record of this species from Duncans, B. C., is probably an error due to a misunderstanding of a note given by me. I have never seen genuine *morna* from anywhere but Colorado, and very few from there, (Dod).

Hadena albiserrata Sm. Duncans, B.C., Sept. and part of October, abundant; usually a rare species, (Hanham).

* *Polia hanhami* Barnes and McDunnough. Duncans, B.C., (Hanham). Jour. N.Y. Ent. Soc., Sept., 1911, p. 155.

1281. *Hyppa brunneicrista* Sm. Banff, Alta., June 5-9, (Sanson).

Feralia columbiana Sm. Winnipeg, Man., May 28, 1909, (Wallis).

Setagrotis dolens Sm. Banff, Alta., July 25, (Sanson); rather more reddish than any hitherto seen. *Euxoa quinta* Smith appears to me to be the same species, (Dod).

Setagrotis filiis Sm. Banff, Alta., Aug. 14, Sept. 11, about a dozen specimens, (Sanson). Apparently not the same as *infimatis* Grt., as I suggested in last year's Record, though I rather expect to find another prior name for it, (Dod).

1455. *Agrotis geniculata* G. & R. Aweme, Man., (Criddle); Trenton, Ont., Aug. 22, (Evans).

1464. *Peridroma astricta* Morr. Stony Mountain, Man., July, 1910, (Wallis).

1506. *Noctua substrigata* Sm. Cartwright, Man., July 18, (Heath).

1541. *Feltia pectinicornis* Sm. Trenton, Ont., Aug. 3, 22, (Evans).

Porosagrotis delorata Sm. High River, Alta., Sept. 1, (Baird). The type was from Mr. Baird. I received it seven years ago from Regina, Sask. It is very likely a dark form of *orthogonia*, which is not uncommon in Colorado and Utah, (Dod). The larvæ of this moth were abundant at Lethbridge, Monarch, and other places in Southern Alberta during the past season, causing serious damage to fodder plants, etc. Moths emerged at Ottawa on Aug 14 and 20, (A.G.).

1693. *Paragrotis mollis* Walk. Banff, Alta., July 8, (Sanson).

Euxoa cocklei Sm. Dawson, Y.T., 1909, (Day).

* *Euxoa rubiata* Sm. Calgary, Aug. 29, (Dod); Trans. Amer. Ent. Soc. xxxvi., 255.

* *Euxoa cervinea* Sm. Vancouver, B.C., July 16; Banff, Alta., Aug. 10; Calgary, Alta., Aug. 30. Trans. Amer. Ent. Soc., xxxvi., 262.

* *Euxoa indensa* Sm. Cartwright, Man., Aug. 19, (Heath); Brandon, Man., July 14, (Hanham); Trans. Amer. Ent. Soc., xxxvi., 263.

Mamestra carbonifera Hamp. Banff, Alta., July 25, 2 males, (Sanson). Described from 2 females taken in the Alberta Rockies, by Mrs. Nicholl. I have a female taken here (Pine Creek) on July 4, 1904. It is a broad-winged species nearest *imbrifera*, of which I, at first, thought it might be a melanic form. Sir George Hampson described it as *Miselia carbonifera*, though the genus is not in his catalogue, (Dod).

1795. *Mamestra nevadae* Grt. Saskatoon, Sask., June 21, (Willing).

Mamestra morana Sm. Banff, Aug. 18, one male, (Sanson). This is "*trifolii* var. *oregonica*" of both Alberta and Kootenai lists and its description as new appears to have been quite justified. It also occurs in Colorado, Wyoming and Washington, (Dod).

* *Mamestra chunka* Sm. Aweme, Man., May 13, 20, 22, (Criddle): Trans. Amer. Ent. Soc. xxxvi., p. 265. High River, Alta., May 4, 1910, (Baird). This is a close ally of *crotchii* Grt., and bears some resemblance to *obesula* and *farnhami*, (Dod).

1920. *Ulolonche orbiculata* Sm. Aweme, Man., May 3, 1910, one female, (Criddle). I believe this to be a small obscure form of this species, which seems rather common in Colorado and Utah, though it may prove distinct. I know of no previous record for Canada, (Dod).

2024. *Graphiphora furfurata* Grt. Trenton, Ont., July 6, (Evans).

* *Stretchia algula* Sm. "Arrow Lake, Brit. Col." Jour. N.Y. Ent. Soc., Sept., 1911, p. 148.

* *Fishia instruta* Sm. De Clair, Man., Sept. 3-15, Trans. Amer. Ent. Soc., xxxvi., 264. Regarding this species Mr. Dod writes: "I have not identified it with certainty, but it appears to be very like the species wrongly listed as *yosemitæ* in the Alberta list."

2083. Xylinia longior Sm. Cartwright, Man., Oct. 12, one specimen, first taken here, (Heath).

2123. *Cucullia montanæ* Grt. Aweme, Man., July 20, (Criddle); Regina, Sask., July 3, 1910, (Willing).

* *Papaipema moeseri* Bird. Montreal, Que., Can. Ent., Feb'y, 1911, p. 42.

2200. *Xanthia pulchella* Sm. Duncans, B.C., not uncommon in Sept. and Oct., (Hanham).

2205. *Conservula anodonta* Gn. Trenton, Ont., July 12, not taken here previously, (Evans).

2231. *Orthosia lutosa* Andrews. Aweme, Man., June 24, (Criddle).

Agroperina lineosa Sm. Described from thirty specimens from Calgary, Alta., and several localities in Manitoba. It is the "*Orthosia conradi*" of my Alberta list, and may really be a race of that species. It has often been, quite erroneously, confused with *Hadena morna* Strk., (Dod).

Agroperina pendina Smith. Has the same range as *lineosa* and has already been looked upon by me as a red variety of it, to which opinion I shall adhere, though slight genitalia differences are claimed, (Dod).

2280. *Pippona bimatris* Harvey. Aweme, Man., July 20, 1910, (Criddle). Previously taken by the late Dr. Fletcher at Aweme.

2289. *Copablepharon grandis* Streck. Aweme, Man., July 4-14, (Criddle). Previously recorded as *absidum*. This latter has not been taken here, according to Dod.

2290. *Copablepharon longipenne* Grt. Aweme, Man., Aug. 19. 1910, one female, (Criddle). This specimen now in my collection agrees with Hampson's figure and my notes on the type. New record for Canada, (Dod).

2492. *Autographa californica* Speyer. Cartwright, Man., May 23, for the first time, at currant bloom; was previously recorded from Winnipeg by Hanham, (Heath).

2493. *Autographa ou* Gn. Aweme, Man., Sept. 27, 1909, one female, (Criddle). I believe this to be the first record for Canada. The species closely resembles *californica* but is darker and less brightly marked. There are slight, though constant, differences in markings. Structurally *ou* has hind tibiae strongly spined, whilst *californica* has not, (Dod).

2494. *Autographa rubidus* Ottol. Aweme, Man., June 15, 1910, (Criddle).

2555. *Alabama argillacea* Hbn. Conspicuous flights of this southern Cotton Moth occurred in Western Ontario in Sept., 1911. At Sarnia and St. Thomas they were extremely abundant. (See Ottawa Naturalist xxv., Dec., 1911, p. 129). Mr. Winn has also reported that the moths were abundant "at light" in Montreal, in the middle of September, (A. G.).

2730. *Melanomma auricinctaria* Grt. Montreal, June, (Chagnon).

2799. *Syneda hudsonica* G & R. Aweme, Man., July 4, 1907, (Criddle).

2847. *Catocala semirelicta* Grt. Hymers, Ont., (Dawson). This specimen was compared with type in British Museum by Sir George Hampson and Mr. H. H. Lyman.

2948. *Anticarsia gemmatilis* Hbn. Winnipeg, Man., Oct. 5, 1909, (Wallis).

3010. *Epizeuxis nigellus* Streck. St. Johns, Que., July, (Chagnon).

3064. *Bomolocha manalis* Walk. Trenton, Ont., 2 sp., July 20, 29; new record for district, (Evans).

3151. *Schizura unicornis* S. & A. High River, Alta., July 29, (Baird).

3181. *Euthyatira semicircularis* Grt. Duncans, B.C., (Hanham).

Bombycia fasciata Barnes & McDonnough. Described in 1910 from Duncans, V.I., (Hanham). It is the species figured by Holland on Plate XL., fig. 27, as *tearlii* Hy. Edw.; *provisa* Hy. Edw. is a third species. (Dod).

* *Olene styx* Barnes and McDunnough. Duncans, B.C., (Hanham); Psyche, Oct., 1911, p. 159.

3272. *Eupithecia palpata* Pack. Hudson, Que., June 11, (Chagnon). A rare species and wrongly placed as a synonym of *luteata* Pack. (L. W. Swett).

3276. *Eupithecia ornata* Hulst. "Ottawa, April 24, May 4, 1906, (Young)". *Ottawa Naturalist*, xxv., p. 106. Regarding this record, Mr. Grossbeck says: "I doubt the occurrence of this species in Eastern Canada; more likely the specimens are worn examples of *E. palpata* Pack." These specimens of Mr. Young's were named *ornata* by the Rev. G. W. Taylor, and as far as I can remember were fresh and therefore in good condition, (A.G.).

3281. *Euchoeca inornata* Hulst. Sherbrooke, Que., July 1, 1910, (Chagnon).

* *Eupithecia chagnoni* Swett. Montreal, Que., June 22, 1907. Can. Ent., July, 1911, p. 255.

3288. *Eupithecia plumbaria* Hulst. "Ottawa, May 24, 1906, (Taylor)," *Ottawa Naturalist* xxv., p. 106. Pearsall makes this a synonym of *E. miserulata* Grt., (J. A. G.).

3295. *Eupithecia fumosa* Hulst. Described from Brockport, N.Y., and S. Abington, Mass. Pearsall says the latter is *coagulata* Gn. "and so the name must be dropped from our lists." The Brockport type still remains to be discovered, however, and until this is examined the name must remain in our catalogue.(J. A. G.). A specimen taken at Ottawa, June 3, 1904, was named *fumosa?* by Rev. G. W. Taylor, (A. G.).

3319. *Eupithecia ravenscostaliata* Pack. Trenton, Ont., May 8, (Evans).

Eupithecia mer[illegible]a Pears. Trenton, Ont., Aug. 1-23, (Evans).

Eupithecia youngata Tayl. Bancroft, Ont., June 11, 1906, (Evans).

3353. *Eustroma nubilata* Pack. St. Johns, Que., July 15. (Chagnon).

3494. *Xystrota hepaticaria* Gn. Trenton, Ont., 2 sp., Aug. 1, 3, (Evans).

3657. *Sciagraphia neptaria* Gn. Saskatoon, Sask., July 3, (Willing).

3662. *Sciagraphia continuata* Walk. Mt. St. Hilaire, Que., May 29, 1910, (Chagnon).

3671. *Macaria labradoriata* Moesch. Ottawa, Aug. 12, 1904, (Fletcher). See *Ottawa Naturalist*, Oct.-Nov., 1911.

3689. *Cymatophora virginalis* Hulst. Trenton, Ont., July 21, (Evans).

Caripeta criminosa Swett. Hymers, Ont., July 2, (Dawson).

3782. *Nepytia phantasmaria* Streck. Duncans, B.C., Oct. 9, only specimen taken, (Hanham).

3793. *Alcis guttata* Hulst. Ottawa, June 20, 1894, (Fletcher). See *Ottawa Natur st*, Oct.-Nov., 1911, p. 110.
3804. *Spodolepis substriataria* Hulst. Hymers, Ont., April 28, July 9, (Dawson).
* *Selidosema manitoba* Grossbeck. Winnipeg, Man., May 25 to June 2, 1909, (Wallis). Can. Ent., July, 1911, p. 225.
3855. *Cleora larvaria* Gn. Windsor Mills, Que., June 10, (Rowland); Saskatoon, Sask., June 23, (Willing).
3942. *Gonodontis warneri* Harv. Humbolt, Sask., (E. Androchovitz).
4043. *Callizzia amorata* Pack. East Bolton, Que., July 20, (Winn).
4175. *Memythrus tricinctus* Harr. Ottawa, larvæ found in willow, April 23, 8 moths emerged, June 2, 8, (Beaulne).
4556. *Raphiptera argillaceella* Pack. Trenton, Ont., July 11, 12, (Evans).
4583. *Crambus myellus* Hbn. Peachland, B.C., Aug. 21, (Wallis).
4599. *Crambus oregonicus* Grt. Peachland, B.C., Aug. 19, (Wallis).
Crambus dorsipunctellus Kearf. Penticton, B.C., Aug. 11, (Wallis).
* *Dioryctria xanthænobares* Dyar. Kaslo, B.C., Aug. 20, 1905, (Cockle); Proc. Wash. Ent. Soc., xiii., 81.
4723. *Glyptocera consobrinella* Zell. Mt. St. Hilaire, Que., June, (Chagnon).
4767. *Salebria basilaris* Zell. St. Johns, Que., July, (Chagnon).
4835. *Euzophera ochrifrontella* Zell. Mt. St. Hilaire, Que., July, (Chagnon).
4838. *Vitula edmandsii* Pack. Mt. St. Hilaire, Que., July, (Chagnon).
4843. *Canarsia ulmiarrosorella* Clem. Mt. St. Hilaire, Que., July, (Chagnon); Montreal, July, (Winn).
4849. *Hulstea undulatella* Clem. Montreal, July, (Winn).
4940. *Platyptilia edwardsii* Fish. Mt. St. Hilaire, Que., May, (Winn).
4964. *Pterophorus elliottii* Fern. Montreal, July, (Winn).
4983. *Pterophorus eupatorii* Fern. Montreal, July, (Winn).
5023. *Exartema exoletum* Zell. Montreal, June 30, 1909, (Winn).
5073. *Olethreutes impudens* Wlsm. Montreal, July 1, 1909, (Winn).
Eucosma confluana Kearf. Montreal, July 4, 1908, (Winn).
Eucosma bilinearia Kearf. Cartwright, Man., June 25, (Heath).
Eucosma pergandeana Fern. Trenton, Ont., June 3, 12, (Evans).
5222. *Epinotia lagopana* Wlsm. Mt. St. Hilaire, Que., May 20, 1910, (Winn).
Peronea manitobana Kearf. Winnipeg, Man., Oct. 5, (Wallis).
Peronea chalybeana Fern. Winnipeg, Man., Oct. 1, (Wallis).
Peronea heindelana Fern. Montreal, June, (Chagnon).
Sparganothis vocaridorsana Kearf. Lethbridge, Alta., July 3, (Wallis).
Pandemis canadana Kearf. Cartwright, Man., June 23, (Heath).
* *Gnorimoschema septentrionella* Fyles. North Wakefield, Que., (Miss Fyles); Can. Ent., Dec. 1911, p. 422.
5671. *Trichotaphe fernaldella* Busck. Peachland, B.C., Aug. 17, (Wallis).
Gelechia alternatella Kearf. Peachland, B.C., Aug. 17, (Wallis).
5894. *Semioscopsis allenella* Wlsm. Montreal, June, (Chagnon); McNab's Island, Halifax, N.S., July 19, (Perrin).
Holcocera nigristriata Wlsm. Penticton, B.C., Aug. 18, (Wallis)
6166. *Mompha subiridescens* Wlsm. Montreal, June 30, 1909, (Winn).
6372. *Gracilaria alchimiella* Scop. Montreal, July 10, 1909, (Winn).

COLEOPTERA.

(Arranged according to Henshaw's List of the Coleoptera of America, North of Mexico).

25b. *Cicindela graminea* Schaupp. Calgary, Alta., April 16, (Criddle).
25e. *Cicindela limbalis* Lec. Calgary, Alta., April 16, (Criddle).
106. *Cychrus tuberculatus* Harr. Duncans, B.C., rare, (Hanham).
109. *Cychrus angulatus* Harr. Duncans, B.C., rare, (Hanham).
122. *Carabus limbatus* Say. Edmonton, Alta., June 30, 1910, (Carr).
123. *Carabus vinctus* Web. Edmonton, Alta., (Carr).
224. *Dyschirius integer* Lec. Toronto, 1 specimen, Oct. 1, 1908; somewhat smaller but otherwise identical with specimens which I have from Texas, (Crew).
232. *Dyschirius globulosus* Say. Bannockburn, Ont., June 20, (Evans).
271. *Clivina cordata* Putz. Trenton, Ont., July 10; not taken heretofore, (Evans).
320. *Bembidium chalceum* Dej. Treesbank, Man., July 29, 1910, (Wallis).
330. *Bembidium complanulum* Mann. Peachland, B.C., July 27, 1909, (Wallis).
364. *Bembidium dyschirinum* Lec. Winnipeg, Man., April 9, 1909, (Wallis).
366. *Bembidium cordatum* Lec. Toronto, Nov. 9, 1908, (Crew).
413. *Bembidium cautum* Lec. Trenton, Ont., 2 specimens, May 21, 23; not taken here previously, (Evans).
483. *Trechus chalybeus* Mann. Toronto, April 3, 1908, (Crew).
545. *Pterostichus coracinus* Newm. Treesbank, Man., July 26, 1910, (Wallis).
674. *Amara obesa* Say. Treesbank, Man., July 28, 1910, (Wallis).
784. *Platynus pusillus* Lec. Winnipeg, Man., May 5, 1910, (Wallis).
822. *Platynus quadripunctatus* De G. Winnipeg, Man.. April 7, 1910, (Wallis).
836. *Platynus nigriceps* Lec. Aweme, Man., June 9, 1910, (Criddle).
889. *Lebia ornata* Say. Winnipeg, Man., June 17, 1910, (Wallis).
941. *Cymindis planipennis* Lec. Treesbank, Man., Aug. 3, 1910, (Wallis).
1061. *Agonoderus pallipes* Fab., var. Winnipeg, Man., April 13, 1909, (Wallis).
1104. *Harpalus rufimanus* Lec. Winnipeg, Man., May 18, 1909, (Wallis)
1110. *Harpalus funestus* Lec. Winnipeg, Man., May 20, 1909, (Wallis).
1145. *Stenolophus cchropezus* Say. Winnipeg, Man., May 8, 1909, (Wallis).
1150. *Acupalpus carus* Lec. Winnipeg, Man., April 15, 1909, (Wallis).
1181. *Anisodactylus carbonarius* Say. Trenton, Ont., May 29, (Evans).
1198. *Anisodactylus verticalis* Lec. Winnipeg, Man., May 7, 1910, (Wallis).
1222. *Haliplus borealis* Lec. Selkirk, Man., May 5; Winnipeg, Man., Oct. 14, (Wallis).
1447. *Agabus gagates* Aube. Edmonton, Alta., May 24, (Carr).
1490. *Dytiscus dauricus* Gebl. Alaska; found at the crossing of the Old Crow River by the 141st meridian, July 20, (F. Lambart).
1675. *Cercyon prætextatum* Say. Winnipeg. Man., April 13, 1909, (Wallis).
1699. *Necrophorus obscurus* Kirby. Edmonton, Alta., April 15, 1910, (Carr).
1786. *Liodes obsoleta* Horn. Toronto, Oct. 9, 1908,(Crew).
Scydmænus clavipes Say. Toronto, March and April, (Crew).
1820. *Scydmænus perforatus* Schaum. Toronto, 2 specimens found under stones, March and April, (Crew).
Pilopius saginatus Casey. Port Credit, Ont., Nov. 8, 1908, (Crew).
1889. *Decarthron longulum* Brend. Toronto, April 23. 1907, (Crew).
2304. *Stenus colon* Say. Toronto, on wet sand along bank of stream, June 6, 1908, (Crew).
* *Baryodma rubricalis* Csy. Metlakatla, B.C., (Keen).
* *Baryodma concurrens* Csy. Metlakatla, B.C., (Keen).

* *Emplenota longiceps* Csy. Metlakatla, B.C., (Keen).
* *Oxypoda demissa* Csy. "Canada, (probably southern Ontario)."
* *Oxypoda manitoba* Csy. Aweme, Man., (Criddle).
* *Oxypoda hiemalis* Csy. Ottawa, Ont., (Harrington).
* *Oxypoda [illegible]tiva* Csy. Victoria, B.C.
* *Oxypoda lassula* Csy. Stikine River, B.C., (Wickham).
* *Oxypoda egestosa* Csy. Victoria, B.C., (Wickham).
* *Oxypoda famula* Csy. Massett, Q. C. I., (Keen).
* *Oxypoda regressa* Csy. Victoria, B.C., (Wickham).
* *Myrmedonia criddlei* Csy. Aweme, Man., (Criddle).
* *Trichiusa columbica* Csy. Metlakatla, B.C., (Keen).
* *Athetá manitoba* Csy. Aweme, Man., (Criddle).
* *Atheta achromata* Csy. Metlakatla, B.C., (Keen).
* *Atheta profecta* Csy. Metlakatla, B.C., (Keen).
* *Atheta concessa* Csy. Metlakatla, B.C., (Keen).
* *Atheta postulans* Csy. Metlakatla, B.C., (Keen).
* *Atheta apposita* Csy. Metlakatla, B.C., (Keen).
* *Atheta sumpta* Csy. Metlakatla, B.C., (Keen).
* *Atheta relicta* Csy. Metlakatla, B.C., (Keen).
* *Atheta districta* Csy. Metlakatla, B.C., (Keen).
* *Atheta rurigena* Csy. Yale, B.C., (Wickham).
* *Atheta mordax* Csy. Stickine River, B.C., (Wickham).
* *Atheta tenuicula* Csy. Aweme, Man., (Criddle).
* *Metaxya awemeana* Csy. Aweme, Man., (Criddle).
* *Metaxya prognata* Csy. Metlakatla, B.C., (Keen).
* *Metaxya erudita* Csy. Aweme, Man., (Criddle).
* *Metaxya surrufa* Csy. Aweme, Man., (Criddle).
* *Metaxya varula* Csy. Aweme, Man., (Criddle).
* *Metaxya criddlei* Csy. Aweme, Man., (Criddle).
* *Pseudota vana* Csy. Massett, Q. C. I., (Keen).
* *Pseudota cornicula* Csy. Metlakatla, B.C., (Keen).
* *Pseudota nanulina* Csy. Metlakatla, B.C., (Keen).
* *Pseudota formalis* Csy. Metlakatla, B.C., (Keen).
* *Moluciba grandipennis* Csy. Metlakatla, B.C., (Keen).
* *Pontomalota luctuosa* Csy. Massett, Q. C. I., (Keen).
* *Autalia truncatula* Csy. Massett, Q. C. I., (Keen).
* *Autalia brevicornis* Csy. Metlakatla, B.C., (Keen).
* *Stictalia carlottæ* Csy. Massett, Q. C. I., (Keen).
* *Gyrophæna criddlei* Csy. Aweme, Man., (Criddle).
* *Gyrophæna keeni* Csy. Metlakatla, B.C., (Keen).
* *Placusa turbata* Csy. Metlakatla, B.C., (Keen).
* *Amblopusa pallida* Csy. Victoria, B.C., (Wickham).
* *Thinusa divergens* Csy. Metlakatla, B.C., (Keen).
* *Thinusa nigra* Csy. Metlakatla, B.C., (Keen).
* *Thinusa robustula* Csy. Metlakatla, B.C., (Keen).
* *Deinopsis harringtoni* Csy. Ottawa, Ont., (Harrington).
* *Myllæna immunda* Csy. Ottawa, Ont., (Harrington).
* *Myllæna scobinella* Csy. Metlakatla, B.C., (Keen).

The above new species of Aleocharinæ and Myllæninæ were described in Memoirs on the Coleoptera, II., by Thos. L. Casey, issued Aug. 15, 1911.

2559 *Lithocharis corticina* Grav. Trenton, Ont., May 23, (Evans).
2719. *Bledius fumatus* Lec. Trenton, Ont., June 20, (Evans).
2736. *Bledius tau* Lec. Trenton, Ont., May 23; not taken heretofore, (Evans).
3069. *Harmonia picta* Rand. Aweme, Man., June 10, 1909, (Criddle).
Hyperaspis binotata Say. Aweme, Man., July, 6., 1905, (Criddle).
3156. *Scymnus tenebrosus* Muls. Toronto, under mullein leaves, March and April, (Crew).
3198. *Endomychus biguttatus* Say. Westbourne, Man., Aug. 27, 1908, (Wallis).
3353. *Telephanus velox* Hald. Port Credit, Ont., Nov. 9 1908, (Crew).
Cryptophagus laticlavus Casey. Trenton, Ont., Sept. 1; not taken heretofore, (Evans).
3381. *Atomaria distincta* Casey. Winnipeg, Man., May 15, 1909, (Wallis). Described from District of Columbia.
3477. *Hister harrisii* Kirby. Edmonton, Alta, (Carr).
3520. *Hister lecontei* Mars. Aweme, Man., June 20, (Criddle.
3678. *Carpophilus niger* Say. Aweme, Man., June 9, 1910. (Criddle).
3689b. *Colastus limbatus* Lec. Aweme, Man., June, 9, 1910, (Criddle).
3728. *Omosità discoidea* Fab. Winnipeg, Man., May 18, 1910, (Wallis).
3746. *Cyllodes biplagiatus* Lec. Aweme, Man., July 4, 1910, (Criddle).
3772. *Rhizophagus remotus* Lec. Aweme, Man., June 9, 1910, (Criddle).
4234. *Elater luctuosus* Lec. Near Shelburne, N.S., July 12, (Gibson).
4384. *Athous brightwelli* Kirby. Near Shelburne, N.S., July 12, (Gibson).
4385. *Athous acanthus* Say. Trenton, Ont., 2 specimens, June 27, July 30, (Evans).
4486. *Corymbites æripennis* Kirby. Near Shelburne, N.S., July 12, (Gibson).
4494. *Corymbites arátus* Lec. Near Shelburne, N.S., July 12, (Gibson).
4583. *Dicerca tenebrosa* Kirby. Aweme, Man., Aug. 11, 1903, (Criddle).
4620. *Melanophila atropurpurea* Say. Winnipeg, Man., June 20, 1909, (Wallis).
4630. *Anthaxia viridifrons* Lap. Aweme, Man., June 21, 1909, (Criddle).
Chrysobothris mali Horn. Aweme, Man., June 22, 1910, (Criddle).
4639b. *Chrysobothris 4-impressa* Lap. & Gory. Aweme, Man., July 2, 28, 1910. (Criddle).
4699. *Acmæodera pulchella* Hbst. Aweme, Man., July 10, 1910, (Criddle).
4755. *Taphrocerus gracilis* Say. Aweme, Man., July 22, 1910, (Criddle).
4762. *Brachys æruginosa* Gory. Aweme, Man., Aug. 10, 1908, (Criddle).
4780. *Caenia dimidiata* Fab. Winnipeg Beach, Man. July 11, 1910, (Wallis).
4810. *Lucidota atra* Fab. Aweme, Man., June 19, 1905, (Criddle).
4815. *Ellychina corrusca* L., var. *lacustris* Lec. Winnipeg, Man., May 21, 1909, (Wallis).
4829. *Photinus ardens* Lec. Winnipeg Beach, Man., July 2, 1910, (Wallis).
Telephorus impressus Lec. Trenton, Ont., June 4, not taken heretofore, (Evans).
4947. *Telephorus rotundicollis* Say. Near Shelburne, N.S., July 12, (Gibson).
4966. *Polemius laticornis* Say. Trenton, Ont., May 29, (Evans).
5022. *Malachius æneus* L. Trenton, Ont., June 9, not taken heretofore, (Evans).
5185. *Thanasimus undulatus* Say. Winnipeg, Man., June 10, 1909, (Wallis).
5206. *Hydnocera longicollis* Ziegl. Aweme, Man., Aug. 3, 1903, (Criddle).
5493. *Atænius stercorator* Fab. Trenton, Ont., 3 specimens, May 21-23, (Evans).
5600. *Geotrupes egeriei* Germ. Ste Therese, Que., (Mignault).
5627. *Trox æqualis* Say. Aweme, Man., April 25, 1910, (Criddle).
5630. *Trox atrox* Lec. Aweme, Man., May 8, 1908, (Criddle).

5699. *Diplotaxis sordida* Say. Trenton, Ont., May 27, (Evans).
5767. *Lachnosterna fraterna* Harr. Trenton, Ont., May 6, June 5; not taken heretofore, (Evans).
5774. *Lachnosterna rugosa* Melsh. Trenton, Ont., May 2-June 9, not taken heretofore, (Evans).
5982. *Tetropium cinnamopterum* Kirby. Winnipeg, Man., June 5, 1909, (Wallis).
5992. *Hylotrupes ligneus* Fab. Winnipeg, Man., May 4, 1910, (Wallis).
6279. *Bellamira scalaris* Say. Winnipeg Beach, Man., July 6, 1910, (Wallis).
6354. *Leptura pubera* Say. Winnipeg, June 25, 1910, (Wallis).
6389. *Monohammus marmorator* Kirby. Ste Therese, Que., (Mignault); Ste. Anne de Bellevue, Que., (Chagnon and Swaine).
6418. *Leptostrus biustus* Lec. Trenton, Ont., July 9, (Evans).
6424. *Liopus variegatus* Hald. Trenton, Ont., July 4, (Evans).
6480. *Saperda candida* Fab. Edmonton, Alta., June 17, (Carr).
6485. *Saperda tridentata* Oliv. Edmonton, Alta., June, 1910, (Carr).
6532. *Donacia hirticollis* Kirby. Winnipeg Beach, Man., Aug. 13, 1910, (Wallis).
6534. *Donacia proxima* Kirby. Aweme, Man., July 27, 1910, (Criddle).
6549. *Hæmonia nigricornis* Kirby. Selkirk, Man., May 24, (Wallis).
6697. *Pachybrachys hepaticus* Melsh. Aweme, Man., Aug. 2, 1909, (Criddle).
6720. *Xanthonia 10-notata* Say. Aweme, Man., May 26; Aug. 31, 1910, (Criddle).
6747b. *Paria 4-notata* Say. Aweme, Man., June 10, 1909, (Criddle).
6786. *Prasocuris vittata* Oliv. Winnipeg, Man., May 15, 1909, (Wallis).
Chrysomela staphylea Linné. McNab's Island, Halifax, N.S., (Perrin). See Entomological News, July, 1911, p. 306.
6832. *Gastroidea cyanea* Melsh. Edmonton, Alta, May 12, July 1, 1910, (Carr).
6848. *Phyllobrotica discoidea* Fab., rare form, Trenton, Ont., June 25, (Evans).
6895. *Trirhabda convergens* Lec. Aweme, Man., June 25,; Aug. 2, 1909, (Criddle).
6932a. *Oedionychis scripticollis* Say. Edmonton, Alta., May 29, 1910, (Carr).
6933. *Oedionychis lugens* Lec. Aweme, Man., May 14; Oct. 6, 1904, (Criddle).
6948. *Disonycha alternata* Ill. Edmonton, Alta., Aug. 23, 1909, (Carr).
7042. *Chætocnema protensa* Lec. Aweme, Man., April 20, 1905, (Criddle).
7102. *Coptocycla aurichalcea* Fab. Winnipeg, Man., Sept. 4, 1909, (Wallis).
Coptocycla bicolor Fab. Edmonton, Alta., May 29, (Carr).
7401. *Upis ceramboides* Linn. Rampart House, at the crossing of the Porcupine River by the 141st Meridian; elevation 1400 ft., July 20, (Nelles). A very northern record.
7528. *Scaphidema æneolum* Lec. Aweme, Man., June 7, 1909, (Criddle).
7651. *Synchroa punctata* Newm. Near Shelburne, N. S., July 12, (Gibson).
Eustrophus repandus Horn. Aweme, Man., June 20, 1910, (Criddle).
7710. *Pytho americanus* Kirby. Winnipeg, Man., June 9, 1910, (Wallis).
7757. *Cephaloon lepturides* Newm. Near Shelburne, N.S., July 12, (Gibson).
7886. *Corphyra elegans* Hentz. Winnipeg, Man., June 17, 1910, (Wallis).
7970. *Anthicus pubescens* Lec. Trenton, Ont., May 1. Not taken here previously, (Evans).
7997. *Dendroides ephemeroides* Mann. Winnipeg Beach, July 6, 1910, (Wallis).
8079. *Epicauta trichus* Pall. Aweme, Man., June 19, 21, 1910, (Criddle).
8236. *Barynotus schœnherri* Zett. Near Shelburne, N.S., July 12, (Gibson). Only Canadian record that I know of.

8487. *Lexius rubellus* Rand. Bannockburn, Ont., June 20; never took it before, (Evans).

8563. *Phyllotrox nubifer* Lec. Aweme, Man., June 2, 1908, (Criddle).

Cryptorhynchus lapathi L. Trenton, Ont., Aug. 27; never taken here previously, (Evans). Mr. John Dearness, of London, Ont., reported that he had received a specimen from New Brunswick.

* *Pissodes utahensis* Hopk. British Columbia, Bear Lake, (London Hill Mine); Tech. Series, 20, part 1, p. 45, U. S. Bureau of Entomology.

* *Pissodes approximatus* Hopk. Guelph, Ont.; Tech. Series 20, part 1, p. 49, U. S. Bureau of Entomology.

* *Pissodes schwarzi* Hopk. Banff, Alta.; Tech. series 20, part 1, p. 50, U. S. Bureau of Entomology.

* *Pissodes canadensis* Hopk. Winnipeg, Man., (Hanham); Tech. series 20, part 1, p. 51, U. S. Bureau of Entomology.

* *Pissodes piperi* Hopk. Glacier, B.C., Tech. series 20, part 1, p. 62, U. S. Bureau of Entomology.

* *Pissodes curriei* Hopk. Kaslo, B.C., (R. P. Currie); Tech. series 20, part 1, p. 65, U. S. Bureau of Entomology.

9071. *Pityophthorus cariniceps* Lec. Ste. Anne de Bellevue, Que.; Ste. Hilaire, Que.; Howick, Que., (Swaine).

9087. *Pityophthorus opaculus* Lec. Hudson, Que., Ste. Anne de Bellevue, Que., Lake Durnford, Que., in *Pinus, Picea* and *Larix,* (Swaine).

* *Trypodendron betulæ* Swaine. Ste. Anne de Bellevue, Que.; Can. Ent., July, 1911, p. 216.

9092. *Typodendron retusus* Lec. Isle Perrot, Que., (Swaine); Aweme, Man., (Criddle).

9099. *Cryphalus striatulus* Mann. Ste. Anne de Bellevue, Que.; Hudson, Que., Memphramagog, Que., (Swaine); Montebello, Que., (Brittain). In *abies,* (J. M. S.).

Dryocœtes eichhoffi Hopk. St. Anne de Bellevue, Que., in *Betula lutea,* (Swaine); St. Anthony, Newfoundland, (C. M. Spencer).

Eccoptogaster piceæ Swaine. St. Anne de Bellevue, Que.; in *Abies balsamea,* (Swaine).

* *Phlœotribus piceæ* Swaine. Ste. Anne de Bellevue, Que.; Can. Ent. July, 1911, p. 220.

9159. *Phlœotribus liminaris* Harr. Isle Perrot, Que.; found only in wild cherry, (Swaine).

* *Ips borealis* Swaine. St. Anthony, Nfd., (C. M. Spencer); Can. Ent., July, 1911, p. 213.

Crypturgus pusillus Gyll. Hudson, Que. (Swaine); Weymouth, N.S. (Treherne and Sanders); in *Pinus, Picea, Abies* (J. M. S.).

Dendroctonus englemanni Hopk. Edmonton, Alta., (Carr).

9204. *Eurymycter fasciatus* Oliv. Stony Mountain, Man., June 11, 1910, (Wallis).

Diptera.

(Arranged according to a Catalogue of North American Diptera, by J. M. Aldrich, Smithsonian Misc. Coll. XLVI, No. 1, 144. The numbers refer to the pages in the catalogue.)

Recently I have had an opportunity of examining a portion of the collection of diptera made at Montreal by Mr. G. Beaulieu, and as there are a number of the

species which have not as yet been recorded from Quebec province, I am including here those of which I have notes. Some of these are well known species, but it is thought well to include them, as they are new additions to the Quebec list. During the past year, as far as I know, no extensive collections of diptera were made in any part of Canada, but a number of specimens collected in previous years have been studied in 1911, and records of some of these are also given.

112. *Chironomus dorsalis* Meign. Rigaud, Que., June 25, 1906, (Beaulieu). New to Quebec province list.

127. *Culex canadensis* Theob. East Bolton, Que., July 22, (Winn). The only Canadian record given by Aldrich is "Lake Simcoe, Ont."

* *Dasyneura gibsoni* Felt. Ottawa, reared from flower heads of Canada thistle, (Gibson); Jour. Econ. Ent., Oct. 1911, p. 479.

164. *Plecia heteroptera* Say. Regina, Sask., Sept. 3-10, 1905, (Willing).

190. *Nemotelus unicolor* Loew. Montreal, June 3, 1906, (Beaulieu). New to Quebec province list.

196. *Chrysops cuclux* Whitney. Rigaud, Que., June 26, 1906, (Beaulieu). Not previously recorded from Quebec province.

198. *Chrysops sackeni* Hine. Montreal, June 24, 1905, (Beaulieu). New to Quebec province list.

217. *Symphoromyia pachyceras* Will. Lake House, Alta., July 15, (Record received from Mr. C. W. Johnson).

247. *Psilocephala melanoprocta* Loew. Aweme, Man., June 1, (Criddle).

247. *Psilocephala platancala* Loew. Aweme, Man., June 24, (Criddle). The only locality record given in Aldrich's catalogue is Texas.

254. *Leptogaster favillaceus* Loew. Rigaud, Que., June, 1906, (Beaulieu). New to Quebec province list.

259. *Cyrtopogon dasyllis* Will. Kaslo, B.C., Sept. 1, 1907, (Cockle). Recorded from Colorado.

259. *Cyrtopogon dasylloides* Will. Kaslo, B.C., Sept. 1, 1907, (Cockle). Recorded from Washington State.

261. *Holopogon guttula* Wied. Rigaud, Que., June 25, 1906, (Beaulieu). New to Quebec province list.

272. *Laphyria aatus* Walk. Montreal, June 7, (Beaulieu). New to Quebec province list.

284. *Psilopodinus caudatus* Wied. Rigaud, Que., June 25, 1906, (Beaulieu). New to Quebec province list.

286. *Psilopodinus scobinator* Loew. Montreal, July 16, 1906, (Beaulieu). New to Quebec province list.

289. *Chrysotus obliquus* Loew. Montreal, July 16, 1906, (Beaulieu). New to Quebec province list.

290. *Chrysotus wisconsinensis* Wheeler. Montreal, July 16, 1906, (Beaulieu). New to Quebec province list.

290. *Campsicnemus hirtipes* Loew. Montreal, July 22, 1906. (Beaulieu). New to Quebec province list.

291. *Argyra calceata* Loew. Montreal, July 7, 1906, (Beaulieu). New to Quebec province list.

293. *Sympycnus lineatus* Loew. Montreal, July 10, 1906, (Beaulieu). New to Quebec province list.

* *Hydrophorus phoca* Aldrich. Corfield, Vanc. Island, B.C., Aug. 7, 1896, (Rev. Mr. Livingston); Psyche, April, 1911, p. 63.

* *Hydrophorus extrarius* Aldrich. St. Johns, Que., Aug. 8, 1901, (Beaulieu); Psyche, April, 1911, p. 66.

300. *Dolichopus brevimanus* Loew. Montreal, July 16, 1906, (Beaulieu). New to Quebec province list.

301. *Dolichopus dakotensis* Aldrich. Montreal, June 14, 1906, (Beaulieu). New to Quebec province list.

301. *Dolichopus detersus* Loew. Montreal, July 22, 1906, (Beaulieu). New to Quebec province list.

302. *Dolichopus latipes* Loew. Montreal, Aug. 14, 1906, (Beaulieu). New to Quebec province list.

303. *Dolichopus ovatus* Loew. Montreal, July 10, 1906, (Beaulieu) New to Quebec province list.

305. *Gymnopternus barbatulus* Loew. Montreal, July 7, 1906, (Beaulieu). New to Quebec province list.

305. *Gymnopternus crassicauda* Loew. Montreal, July 7, 1906, (Beaulieu). New to Quebec province list.

305. *Gymnopternus difficilis* Loew. Montreal, July 7, 1906, (Beaulieu). New to Quebec province list.

306. *Gymnopternus ventralis* Loew. Montreal, July 7. 1906, (Beaulieu). New to Quebec province list.

309. *Pelastoneurus vagans* Loew. Montreal, July 22, 1906, (Beaulieu). New to Quebec province list.

311. *Platypalpus æqualis* Loew. Montreal, July 16, 1906, (Beaulieu). New to Quebec province list.

312. *Platypalpus crassifemoris* Fitch. Montreal, June 17, 1906, (Beaulieu). New to Quebec province list.

312. *Platypalpus hastatus* Melander. Montreal, June 17, 1906, (Beaulieu). New to Quebec province list.

312. *Platypalpus trivialis* Loew. Montreal, Aug. 18, 1906, (Beaulieu). New to Quebec province list.

318. *Syndyas polita* Loew. Montreal, July 7, 1906, (Beaulieu). New to Quebec province list.

319. *Hybos slossonæ* Coq. St. Johns, Que., Aug. 1, (Beaulieu). New to Quebec province list.

319. *Leptopeza compta* Coq. Montreal, July 14, 1906, (Beaulieu). New to Quebec province list.

325. *Hilara femorata* Loew. Rigaud, Que., June, 1906, (Beaulieu). New to Quebec province list.

326. *Hilara tristis* Loew. St. Johns, Que., July 1, (Beaulieu). New to Quebec province list.

329. *Cyrtoma longipes* Loew. Montreal, July 7, 1906, (Beaulieu). New Quebec province list.

331. *Rhamphomyia longicauda* Loew. Montreal, June 7, 1906, (Beaulieu). New to Quebec province list.

332. *Rhamphomyia mutabilis* Loew. Montreal, June 10, 1906, (Beaulieu). New to Quebec province list.

350. *Pipiza calcarata* Loew. Montreal, June 3, 1906, (Beaulieu). New to Quebec province list.

350. *Pipiza pulchella* Will. Rigaud, Que., June 27, 1906, (Beaulieu). New to Quebec province list.

355. *Pyrophana granditarsus* Forst. Ottawa, June 2, 1908, (J. A. Letourneau).

359. *Platychirus chætopodus* Will. Montreal, (Beaulieu); Mr. Chagnon has also seen the species from Sherbrooke, Que. New to Quebec province list.

359. *Platychirus peltatus* Meig. Montreal, June 17, 1906 (Beaulieu); Rigaud, Que., (Record sent by Mr. Chagnon). New to Quebec province list.

362. *Eupeodes volucris* O. S. High River, Alta., (Baird); Regina, Sask., Sept. 2, 1907, (Willing).

369. *Xanthogramma emarginata* Say. Montreal, July 16, 1906, (Beaulieu). New to Quebec province list.

373. *Sphaerophoria scripta* Linne. Montreal, Aug. 16, 1906, (Beaulieu). Mr. Chagnon informs me that the species which he has recorded as *cylindrica* is probably *scripta*, (A. G.).

383. *Pyritis montigena* Hunter. Innisfail, Alta., April 16, 1905, (Willing).

394. *Helophilus porcus* Walk. Montreal, June 10, 1906, (Beaulieu). New to Quebec province list.

401. *Brachypalpus rileyi* Will. St. Hilaire, Que., May 24. 1906, (Beaulieu). New to Quebec province list.

412. *Oncomyia loraria* Loew. Montreal, Aug. 19, 1906, (Beaulieu). New to Quebec province list.

423. *Alophora diversa* Coq. Montreal, Sept. 16, 1906, (Beaulieu). New to Quebec province list.

Alophora magnipennis John. St. Hilaire, Que., May 24, 1906, (Beaulieu). New to Quebec province list.

451. *Ocyptera dosiades* Walk. Aweme, Man., Aug. 17, (Criddle).

* *Linnæmyia anthracina* Thomp. Hymers, Ont., reared at Ottawa from larvæ of *Hyphoraia parthenos*, received from Mr. H. Dawson, (Gibson); Can. Ent., Aug., 1911, p. 266.

452. *Linnæmyia picta* Meig. Rigaud, Que., June 25, 1906, (Beaulieu). New to Quebec province list.

465. *Sturmia nigrita* Townsend. Rigaud, Que., June 25, 1906, (Beaulieu). New to Quebec province list.

484. *Peleteria ænea* Stæger. Calgary, Alta., July 10, 1903, (Willing).

488. *Echinomyia decisa* Walk. Saskatoon, Sask., Sept. 3. (Willing).

507. *Thelaira leucozona* Panzer. Montreal, Aug. 19, 1906, (Beaulieu). New to Quebec province list.

538. *Homalomyia flavibasis* Stein. Montreal, July 7, 1906, (Beaulieu). New to Quebec province list.

538. *Homalomyia incisurata* Zett. Montreal, Aug. 16, 1906. (Beaulieu). New to Quebec province list.

540. *Hyetodesia deleta* Stein. East Bolton, Que., July 28, (Winn). New to Quebec province list.

545. *Spilogaster obscurinervis* Stein. Montreal, June 14, 1906, (Beaulieu). New to Quebec province list.

549. *Anthomyia latitarsus* Zett. Montreal, Aug. 10, 1906, (Beaulieu). New to Quebec province list.

553. *Eustalomyia brixia* Walk. Montreal, (Beaulieu). New to Quebec province list.

553. *Eustalomyia vittipes* Zett. Montreal, June 3, 1906, (Beaulieu). New to Quebec province list.

560. *Cœnosia calopyga* Loew. East Bolton, Que., July 22, (Winn). New to Quebec province list.

563. *Schoenomyza chrysostoma* Loew. Montreal, July 7, 1906, (Beaulieu). New to Quebec province list.

570. *Heteroneura melanostoma* Loew. Montreal, June 14, 1906, (Beaulieu). New to Quebec province list.

578. *Sciomyza obtusa* Fallen. Montreal, Aug. 18, 1906, (Beaulieu). New to Quebec province list.

581. *Sepedon fuscipennis* Loew. Montreal, July 22, 1906, (Beaulieu). New to Quebec province list.

581. *Sepedon pusillus* Loew. Montreal, April, 1906, (Beaulieu). New to Quebec province list.

582. *Lonchæa rufitarsus* Macq. Montreal, June 7, 1906, (Beaulieu). New to Quebec province list.

582. *Palloptera jucunda* Loew. Kaslo, B.C., Oct. 27, 1906; (Cockle).

585. *Sapromyza fraterna* Loew. Montreal, Aug. 16, 1906, (Beaulieu). New to Quebec province list.

585. *Sapromyza lupulina* Fab. Montreal, July 20, 1906, (Beaulieu). New to Quebec province list.

587. *Sapromyza vulgaris* Fitch. Montreal, July 16, 1906, (Beaulieu). New to Quebec province list.

597. *Chætopsis ænea* Wied. Aweme, Man., June 27-July 9, (Criddle).

616. *Calobata antennipes* Say. St. Johns, Que., July 1, 1907. (Beaulieu). New to Quebec province list.

619. *Nemopoda minuta* Wied. Montreal, Aug. 21, 1906, (Beaulieu). New to Quebec province list.

621. *Lozocera collaris* Loew. Montreal, Aug 14, 1906, (Beaulieu). New to Quebec province list.

632. *Chlorops* (*Anthracophaga*) *sanguinolenta* Loew. Rouville, Que., May 24, 1906, (Beaulieu). New to Quebec province list.

633. *Chlorops melanocera* Loew. Montreal, July 7, 1906, (Beaulieu). New to Quebec province list.

635. *Eurina exilis* Coq. Montreal, July 14, 1906, (Beaulieu). New to Quebec province list.

637. *Oscinis decipiens* Loew. Kaslo, B.C., Sept. 1, 1907. (Cockle). The only locality record in Aldrich's catalogue is Sitka.

640. *Phortica leucostoma* Loew. Montreal, July 7, 1906, (Beaulieu). New to Quebec province list.

641. *Drosophila amœna* Loew. Montreal, Aug. 5, 1906, (Beaulieu). New to Quebec province list.

642. *Drosophila funebris* Fab. Montreal, Oct. 1, 1905, (Beaulieu). New to Quebec province list.

643. *Drosophila quinaria* Loew. Rigaud, Que., June 27, 1906, (Beaulieu). New to Quebec province list.

651. *Miliichia indecora* Loew. Rigaud, Que., June 25, 1906, (Beaulieu). New to Quebec province list.

656. *Pseudolfersia maculata* Coq. St. Therese, Que., (Mignault). New to Quebec province list.

HYMENOPTERA.

In this Order, unfortunately, little definite work seems to have been done in Canada in 1911. Small collections made in previous years have been determined, and data regarding some of these are now included here. Dr. Wheeler has determined a number of different species of ants, records of some of which are also given.

Spalangera nigra Latr. Ottawa, Sept. 23, (Sanders).

Stenamma brevicorne Mayr. Weymouth, N.S., (Sanders).

Leptothorax curvispinosus Mayr. Weymouth, N.S., (Sanders).

Polichoderus plagiata Mayr. Grand Manan, N.B, (Sanders); Aweme, Man., 1907, (J. Fletcher).

Brachymyrmex heeri depilis Emery. Weymouth, N.S., (Sanders).

Lasius niger L., var *neoniger* Emery. Grand Manan, N.B.; Ottawa, (Sanders).

Lasius brevicornis Emery. Ottawa, (Sanders).

Lasius umbratus Nyl., subsp. *mixtus* Nyl. var. *aphidicola* Walsh. Ottawa, (Sanders).

Lasius umbratus Nyl., subsp. *subumbratus* Viereck. Beaver Lake and Olds, Alta., 1907, (Willing).

Formica sanguinea Latr. subsq. *subintegra* Emery. St. Stephen, N.B.; Ottawa, (Sanders).

Formica fusca L. var. *subsericea* Say. St. Stephen, N.B.; Ottawa, (Sanders).

Formica fusca L. var. *neoclara* Emery. Chilliwack Valley, B.C., (J. Macoun).

Formica lasioides Emery, var. *picea* Emery. Ottawa, (Sanders).

Formica subpolita Mayr. var. *neogagates* Emery. Ottawa, (Sanders).

Tiphia relativa Vier. Peachland, B.C., Aug. 2, 1909, (Wallis).

Speco'es arroyanus Ckll. Lethbridge, Alta., (Wallis). Known from New Mexico and Colorado, (T.D.C.).

* *Tetralonia medicata* Ckll. Medicine Hat, Alta., May 30, 1904, (Willing); Can. Ent., Jan. 1911, p. 34.

* *Anthrophora bomboides willingi* Ckll., n. subsp. Prince Albert, Sask., June 18, 1905, (Willing)

* *Prosopis potens* Metr Montreal, June 10, 1906; Trans. Amer. Ent. Soc. xxxvii, 104.

Osmia coloradensis Cress. Peachland, B.C., Aug. 2, 6, 1909, (Wallis).

Atanycolus montivagus Cress. Penticton, B.C., Aug. 12, 1909, (Wallis).

* *Pterochilus leucotaenius* Rohwer. Lethbridge, Alta., July 4, 9, 1909, (Wallis); Proc. U. S. N. M., vol. 40, p. 554.

* *Diodontus bidentatus* Rohwer. Nerepis, N.B., Aug. 20, (Leavitt). Proc. U. S. N. M., vol. 40, p. 561.

* *Hoplocampa xantha* Rohwer. Ottawa; Tech. series No. 20, part IV., U. S. Bureau of Entomology, p. 144.

* *Dimorphopteryx abnormis* Rohwer. Ottawa, 1900; Proc. U. S. N. M., vol. 41, p. 406.

Parnopes hageni Vier. Peachland, B.C., Aug. 23, 1909, (Wallis).

Bombus occidentalis Green. Fort Selkirk, Y.T., 1908, (Miss Seymour).

Psithyrus ashtoni Cress. Kenora, Ont., Sept. 9, 1909.

* *Psithyrus fernaldæ* Franklin. Kaslo, B.C.; Metlakatla.; Trans. Amer. Ent. Soc., xxxvii, 165.
* *Psithyrus tricolor* Franklin. Banff, Alta.; Metlakatla, B.C., (Keen); Weymouth, N.S., (P. G. Bolster); Trans. Amer. Ent. Soc. xxxvii, 167.

Order Hemiptera.

Unfortunately, as yet, we have few workers in Canada in this order. During the year Mr. J. B. Wallis, of Winnipeg, Man., and Mr. J. D. Evans, of Trenton, Ont., have had collections determined by Mr. Van Duzee, and some of these, together with some interesting species taken at Danville, Que., between July 20 to 30, 1911, and at North Hatley, Que., between July 17 to 24, 1909, by Mr. G. A. Moore, are included here. Miss Edith Patch, of the Agricultural Experiment Station, Orona, Maine, is now working on Psyllidæ and would be glad to receive any material from Canada. Below are also included definite records of a few of these latter insects which have been determined by Miss Patch.

Stictocephala inermis Fab. Treesbank, Man., July 18, 1910, (Wallis).
Telamona ampelopsidis Harr. Danville, Que., July, (Moore).
Cyrtobolus maculifrontis Emmons. Co. Hastings, Ont., July 2, (Evans).
Publilia modesta Uhler. Westbourne, Man., Sept. 4, 1910, (Wallis).
Cixius basalis Van D. Trenton, Ont., July 13, (Evans).
Laccocera vittipennis Van D. Danville, Que., July, (Moore).
Bruchmorpha tristis Stal. Treesbank, Man., July 21, 1910, (Wallis).
Aphelonema simplex Uhler. Treesbank, Man., July 21, 1910, (Wallis).
Pissonotus marginatus Van D. Danville, Que., July, (Moore).
Pissonotus ater Van D. Ottawa, July 17, 1904, (Metcalfe).
Liburnia campestris Van D. Danville, Que., July, (Moore).
Liburnia pellucida Fabr. Trenton, Ont., June 6; Aug. 6, (Evans).
Lepyronia gibbosa Ball. Treesbank, Man., July 21, 1910, (Wallis).
Aphrophora signoretti Fitch. Treesbank, Man., July 20, 1910, (Wallis); Meach Lake, Que., July 20, 1905, (Gibson).
Philaronia bilineata Say. Lethbridge, Alta., July 5, 1909; Treesbank, July 20, 1910, (Wallis).
Proconia costalis Fab. Treesbank, Man., April 17, 1908; Winnipeg, Man., May 18, 1909, (Wallis).
Dræculacephala manitobiana Ball. Husavick, Aug. 23, 1910, (Wallis).
Gypona cana Burm. Peachland, B.C., July 26, 1909, (Wallis).
Pediopsis basalis Van D. Co. Hastings, Ont., June 20, (Evans).
Idiocerus snowi G. & B. Treesbank, Man., July 21, 1910 (Wallis).
Athysanus lineola Fall. Trenton, Ont., June 20, (Evans).
Phlepsius nebulosus Van D. Husavick, Man., July 6, 1910, (Wallis).
Phlepsius decorus O. & B. Husavick, Man., Aug. 27, 1910, (Wallis).
Cicadula lineatifrons Stal. Husavick, Man., Aug. 23, 1910, (Wallis).
Empoasca atrolabes Gill. Co. Hastings, Ont., June 20, (Evans).
Livia vernalis Fitch. Aylmer, Que., May 31, 1903, (Metcalfe).
Livia maculipennis Fitch. Brockville, Ont., Sept. 20, 1903, (Metcalfe).
Aphalara metzaria Crawford. Aylmer, Que., May 31, 1903, (Metcalfe).
Aphalara veaziei Patch. Hull, Que., July 26, 1903, (Metcalfe).
Psylla floccosa Patch. Ottawa, July 12, 1903; Hull, Que., Aug. 1, 1904, (Metcalfe).

Psylla galeaformis Patch. Ottawa, July 12, 1903; Aug. 2, 24, 1904; June 26, 1904; Hull, Que., Aug. 1, 1904, (Metcalfe.)
Psylla striata Patch. Ottawa, on ironwood, Aug. 25, 1907; on basswood, July 1, 1904; Hull, Que., on maple, Aug. 1, 1904, (Metcalfe).
Trioza obtusa Patch. Brockville, Ont., Oct. 11. 25, 1903, (Metcalfe).
Banasa sordida Uhler. Co. Hastings, Ont., Aug. 27, (Evans).
Thyreocoris nitiduloides Wolff. North Hatley, Que., July, 1909, (Moore).
Aradus quadrilineatus Say. Winnipeg, Man., May 18, 1909, (Wallis).
Sphragisticus nebulosus Fall. Winnipeg. Man., May 17, 1909, (Wallis).
Emblethis vicarius Horv. Treesbank, Man., July 26, 1910 (Wallis).
Scolopostethus atlanticus Horv. Winnipeg, Man., May 13, 1909, (Wallis).
Corynocoris distinctus Dallas. Grimsby, Ont., Sept. 16, 1894, (Metcalfe).
Megalotomus quinquespinosus Say. Aylmer, Que., Aug. 21, 1910, (Metcalfe).
Corizus crassicornis L. Treesbank, Man., July 21, 1910, (Wallis).
Leptoypha mutica Say. North Hatley, Que., July, 1909, (Moore).
Pagasa fusca Stein. Winnipeg Beach, Man., Aug. 25, 1910, (Wallis).
Reduviolus propinquus Reut. Husavick, Man., July 11, 1910, (Wallis).
Nœogeus burmeisteri L. & S. Treesbank, Man., July 25, 1910. (Wallis).
Mesovelia mulsanti White. Husavick, Man., July 12, 1910, (Wallis).
Triphleps tristicolor B. White. Peachland, B.C., July 24, 1909, (Wallis).
Anthocoris borealis Dallas. North Hatley, Que., July, (Moore).
Anthocoris melanocerus Reut. Peachland, B.C., July 24, 1909, (Wallis).
Anthocoris musculus Say. Danville, Que., July, (Moore).
Orthotylus congrex Uhler. Co. Hastings, Ont., June 14, 20, (Evans).
Orthotylus marginatus Uhler. Co. Hastings, Ont., June 20, (Evans).
Dicyphus californicus Stal. Trenton, Ont., Aug. 20, (Evans).
Fulvius brunneus Prov. Trenton, Aug. 10, (Evans).
Stenotus binotatus Fabr. Trenton, Ont., June 26, (Evans).
Hadronema picta Uhler. Lethbridge, Alta., June 6, 1909, (Wallis).
Resthenia insignis Say. Danville, Que., July, (Moore).
Dichrooscytus suspectus Reut. Husavick, Man., July 10, 1910, (Wallis).
Lygus plagiatus Uhler. Winnipeg, Man., Sept. 4, 1909, (Wallis).
Tropidosteptes commissuralis Reut. Hull, Que., Aug. 14, 1904, (Metcalfe)
Tropidosteptes amœmus Uhler. Husavick, Man., July 11, 1910, (Wallis).
Camptobrochis validus Reut. Peachland, B.C., Aug. 5, 1909, (Wallis).
Horcias dislocatus Say, var. *affinis* Reut. Ottawa, May 13, (Metcalfe).
Mimiceps gracilis Uhler. Carlsbad Springs, Ont., June 26, 1904, macropterous form, (Metcalfe).
Salda interstitialis Say. Winnipeg, Man., May 20, 1910, (Wallis); North Hatley, Que., July, 1909, (Moore).
Salda littoralis L. Husavick, Man., July 3, 1910, (Wallis).

Neuropteroid Insects (Except Odonata).

(Arranged according to a catalogue of the Neuropteroid Insects, (Except Odonata), of the United States, by Nathan Banks; American Entomological Society, 1907. The numbers refer to the pages of the catalogue).

All of the species mentioned below have been determined by Dr. Banks. Some, it will be noticed, are of not uncommon occurrence and even widespread distribution,

but it has been thought advisable to include them all here as our knowledge of the distribution of these neuropteroid insects is very limited and almost any definite record is of value. With but few exceptions none of the species here mentioned have been recorded in the RECORD. The few previously mentioned are from widely separated localities.

ORDER ARCHIPTERA.

13. *Isoperla bilineata* Say. Winnipeg, Man., May 29, 1908, (Wallis).
16. *Ephemera decora* Walk. Husavick, Man., July 10, 1910, (Wallis).
16. *Ephemera simulans* Walk. Go Home Bay, Ont., late June and early July, (Walker).
17. *Cœnis dimuta* Walk. Go Home Bay, Ont., July 4—Aug. 10, 1908, (Walker).
18. *Callibætis ferrugineus* Walsh. Husavick, Man., Aug. 16, 1910, (Wallis).
20. *Heptagenia canadensis* Walk. Husavick, Man., July 2, 1910, (Wallis).
20. *Heptagenia flavescens* Walsh. Peachland, B.C., Aug. 23, 1909, (Wallis).
20. *Heptagenia interpunctata* Say. Go Home Bay, Ont., June 29, 1908, (Walker).
20. *Heptagenia luridipennis* Burm. Go Home Bay, Ont., June 26—Aug., 1908, (Walker).
20. *Bætisca obesa* Say. Go Home Bay, Ont., June 27, 1907, (Walker).

ORDER NEUROPTERA.

21. *Chauliodes serricornis* Say. Ottawa, Aug. 1910, (Bro. Germain).
27. *Chrysopa majuscula* Banks. Penticton, B.C., Aug. 12, 1909, (Wallis).
27. *Chrysopa nigricornis* Burm. Husavick, Man., Aug. 16, 1910, (Wallis).
28. *Chrysopa ypsilon* Fitch. Winnipeg, Man., June 10, 1910, (Wallis).
* *Chrysopa canadensis* Banks. Go Home Bay, Ont., July 12, (Walker); Trans. Amer. Ent. Soc., xxxvii, 340.
30. *Brachynemurus abdominalis* Say. Aweme, Man., July 18, 1910, (Wallis); Go Home Bay, Ont., July 31, 1907, (Walker).
31. *Brachynemurus brunneus* Currie. Aweme, Man., July 20, 1910, (Wallis).
31. *Brachynemurus nigrilabris* Hagen. Aweme, Man., July 20, 1910, (Wallis).
32. *Cyrptoleon nebulosum* Oliv. Giant's Tomb Island, Georgian Bay, July 7-30, 1907, (Walker).

ORDER TRICHOPTERA.

35. *Phryganea cinerea* Walk. Go Home Bay, Ont., (Walker).
35. *Neuronia postica* Walk. Go Home Bay, Ont., (Walker).
35. *Neuronia pardalis* Walk. Hymers, Ont., June 16, 1910, (Dawson).
35. *Agrypnia straminea* Hagen. Winnipeg, Man., June 1, 1908, (Wallis).
36. *Limnephilus externus* Hagen. Winnipeg, Man., Sept. 13, 1910, (Wallis).
36. *Limnephilus indivisus* Walk. Temagami, Sept. 14, 1908, (Walker).
*. *Rhyacophila grandis* Banks. Vernon, B.C., and Bon Accord, B.C., June 14, (Russell); Trans. Amer. Ent. Soc., xxxvii, 351.
42. *Brachycentrus incanus* Hagen. Winnipeg, Man., May 31, 1910, (Wallis).
43. *Helicopsyche borealis* Hagen. Husavick, Man., Aug. 4, 1910, (Wallis).
Lepidostoma wisconsinensis Vorhies. Husavick, Man., July 2, 1910, (Wallis).

45. *Molanna cinerea* Hagen. Go Home Bay, Ont., June 28-July 12, 1908, (Walker).
45. *Molanna rufa* Hagen. Husavick, Man., July 2, 1910, (Wallis).
45. *Leptocerus resurgens* Walk. Go Home Bay, Ont., July 4, 12, 1907, (Walker).
45. *Triænodes borealis* Banks. Husavick. Man., July 2, 1910, (Willis).
45. *Triænodes ignita* Walk. Treesbank, Man., July 29, 1910, (Willis).
45. *Leptocella albida* Walk. Winnipeg, Man., June 29, 1909, (Wallis).
46. *Leptocella uwarowii* Kolen. Husavick, Man., Aug. 23, 1910, (Wallis).
46. *Œcetina incerta* Walk. Husavick, Man., July 4, 1910, (Wallis); Go Home Bay, Ont., July 12, 22, 1908, (Walker).
47. *Macronema zebrata* Hagen. Sandy Gray Falls, Musquash River, Ont., July 24, 1907, (Walker).
47. *Hydropsyche alternans* Walk. Winnipeg, Man., June 3, 1910, (Wallis).
47. *Plectrocnemia confusus* Hagen. Go Home Bay, Ont., June 27-July 5, 1907, (Walker).
*. *Polycentropus remotus* Banks. Peachland, B.C., July 23, (Wallis); Trans. Amer. Ent. Soc. xxxvii, 359.
48. *Nyctiophylax affinis* Banks. Go Home Bay, Ont., July 5-22, 1907. (Walker).
*. *Nyctiophylax moestus* Banks. Peachland, B.C., Aug. 19, (Wallis); Trans. Amer. Ent. Soc., xxxvii, 359.

ODONATA.

Dr. E. M. Walker of Toronto, has sent to me the following interesting records which I am glad to include.

Amphiagrion saucium Burm. Aweme, Man., June, 1911. 1 female, teneral, (Wallis). First Manitoba record.

Hagenius brevistylus Selys. Mississauga River, Parry Sound Dist., Aug. 2, 1911, 1 male, (Hahn).

Ophiogomphus rupinsulensis Walsh. Shawniga River, Parry Sound Dist., Ont., Aug. 10, 1910, (Hahn). At the same locality Mr. Hahn also obtained a number of exuviæ of an *Ophiogomphus*, probably belonging to the same species.

Ophiogomphus severus Hag. Aweme, Man., July 19, 1910, (Wallis). Two females, probably of this species.

Gomphus externus Hag. Winnipeg, Man., June 25, 1910, 3 males, 1 female, (Wallis).

Gomphus lividus Selys. Shawniga River, Parry Sound Dist., Aug. 10, 1910. A number of exuviæ, (Hahn).

Gomphus scudderi Selys. Mississauga River, Parry Sound Dist., Aug. 2, 1911. 1 male, (Hahn).

Dromogomphus spinosus Selys. Mississauga River, Parry Sound Dist., Aug. 2, 1911, 1 male, (Hahn).

Basiaeschna janata Say. Shawniga River, Parry Sound Dist., Aug. 10, 1911. Several exuviæ. (Hahn).

Boyeria vinosa Say. Shawniga River, Aug. 10, 1911, 1 male, 1 female, (Hahn).

A number of *Boyeria* exuviæ were also taken at this locality, and are separable into two slightly differing forms, one of which is identical with the exuvia of *B. grafiana*, so that the other doubtless belongs to *vinosa*.

Aeshna eremita Scudd. Shawniga River, Aug. 10, 1911, 2 exuviæ, (Hahn).

Aeshna interrupta Walk. Mississauga River, Aug. 2, 1911, 3 males, 1 female, (Hahn).

Neurocordulia yamaskanensis Prov. Shawniga River, Aug. 10, 1911, numerous exuviæ, (Hahn).

Helocordulia uhleri Selys. Shawniga River, Aug. 10. 1911, 1 exuvia, (Hahn).

Somatochlora macrotona Wmsn. Winnipeg. June 10-19, 1910; 3 males, 2 females; Husavick, Man., Aug. 17, 1910, 1 female, (Wallis).

Libellula pulchella Drury. Husavick, Man., July 11, 1910, (Wallis). Most northwesterly record.

Pantala hymenæa Say. Husavick, Man., July 11, 1910, 1 male, (Wallis). First Canadian Record.